

Names of Common Bean Varieties Released in Central America and the Caribbean

Juan Carlos Rosas, EAP/ Zamorano, Honduras; James S. Beaver, University of Puerto Rico, Mayagüez; Steve Beebe, CIAT, Cali, Colombia; and Abelardo Viana, PROFRIJOL/COSUDE

Collaborative research in Central America and the Caribbean during the last 20 years has permitted the development and release of several improved common bean (*Phaseolus vulgaris* L.) cultivars which have had a significant level of adoption and impact in the region (Mather *et al.*, 2003; Johnson and Klass, 1999). Due to their superior performance across the region, several improved cultivars were released in various countries during a short period of time. Unfortunately, National Bean Programs involved in the release process often gave these cultivars different names in different countries. Collaborative bean research activities have been conducted in Central America, Mexico and the Caribbean since the 1980's, by the PROFRIJOL Bean Research Network and under the scientific leadership of CIAT (Centro Internacional de Agricultura Tropical). In the 1990's, scientists of the bean research programs from the University of Puerto Rico and the Escuela Agrícola Panamericana (EAP), Zamorano, Honduras, supported by the Bean/Cowpea CRSP Program, joined the PROFRIJOL network and became involved in the development of bean cultivars for the region. Organizations or persons that were not previously involved in the collaborative research that resulted in the releases of small red and black bean cultivars for Central American may not be familiar with the names currently being used for a specific cultivar in different countries. This situation has already caused some confusion concerning the correct identity of bean cultivars. The purpose of this publication is to serve as a reference to guide researchers, producers, seed dealers, public officials and brokers, in their decisions with regards to the use of improved cultivars for commercial production of grain or seed in the region or elsewhere. Its content only refers to those bean cultivars that are known with at least two different names in the region. In addition, the following provides descriptions of the most important traits of these cultivars.

The small red breeding line DOR 364, derived from the cross BAT 1215//RAB 166/DOR 125, was released in 1990 as the cultivar "Dorado" in Honduras and "CENTA Cuscatleco" in El Salvador. Other releases of the line DOR 364 were "DORICTA" in Guatemala in 1992, "DOR 364" in Nicaragua in 1993 and "Delicias 364" in Cuba in 1999. Dorado has a quantitative resistance to bean golden yellow mosaic (BGMV), expressed as reduced yellow mosaic symptoms (Beebe, 1994; Miklas *et al.*, 1996). Dorado carries the dominant *I* gene for resistant to bean common mosaic (BCM). Dorado has a type II plant, an intermediate maturity of 72-74 days after planting (DAP) and good and stable yields in diverse environments. DOR 364 has a dark, shiny red kidney seed shape and an individual seed weight of 0.21 g.

The small red breeding line DOR 482, derived from the cross DOR 367//DOR 364/IN 101, was released in Honduras as the cultivar "Don Silvio" in 1992 and in El Salvador as "Rojo Salvadoreño" in 1997. Don Silvio has a higher BGYM resistant than Dorado due to the addition of the recessive gene *bgm-1* that confers resistance to chlorosis, transferred to its parental line DOR 367 from the source line A429 (inherited from the original source "Garrapato"). It also carries the dominant *Bgp-1* gene that confers resistance to pod deformation in the presence of BGYM (Molina and Beaver, 1998), and the dominant *I* gene for resistance to BCM. Don Silvio has a type II plant and an intermediate maturity of 70-72 DAP. Don Silvio has a shiny dark red, kidney shaped seed and an individual seed weight of 0.24 g.

The small red breeding line MD 30-75, derived from the cross DOR 483//DOR 391/Pompadour J, was released in Honduras in 1996 as the cultivar "Tio Canela 75" (Rosas *et al.*, 1997). In 2000, this line was released in El Salvador as "CENTA 2000", in Panama as "Rojo Chiricano" and in Nicaragua as "INTA Canela". Tio Canela 75 is a BGYM resistant cultivar that carries the QTL, *bgm-1* and *Bg-pl* resistant genes. Tio Canela 75 also carries the dominant *I* gene for resistance to BCM. It is well adapted to several environments, has a type II plant and an intermediate maturity of 70-72 DAP. Tio Canela 75 has a shiny red, ovoid shaped seed and an individual seed weight of 0.22 g.

During the 2002 and 2003, the small red breeding line EAP 9510-77, derived from the cross Tio Canela 75/DICTA 105, was released as the cultivar "Amadeus 77" in Honduras, "INTA Rojo" in Nicaragua, "CENTA San Andres" in El Salvador, "Cabecar" in Costa Rica and "IDIAP R3" in Panama. Amadeus 77 is a BGYM resistant cultivar carrying the QTL, *bgm-1* and *Bgp-1* genes for resistance to BGYM. It also carries the dominant *I* gene for resistance to BCM. Amadeus 77 was developed as a heat tolerant line for the coastal regions of Central America. It has a type II plant and an early maturity of 68-70 DAP. Amadeus 77 has light shiny red, ovoid elongated seed shape and an individual seed weight of 0.25 g.

The small red breeding line EAP 9510-1 (a sister line of EAP 9510-77), was released as the cultivar "Carrizalito" in Honduras in 2003 and "Telire" in Costa Rica in 2004. Carrizalito is a BGYM resistant cultivar carrying the QTL, *bgm-1* and *Bgp-1* genes for resistance to BGYM. Carrizalito also carries the dominant *I* gene for resistance to BCM. Carrizalito has been identified as a high yielding cultivar. It has an upright type III plant and an early maturity of 68-70 DAP. Carrizalito has a shiny red, ovoid seed shape and an individual weight of 0.22 g.

The black seeded line DOR 390, derived from the double cross DOR 364/G18521//DOR 365/LM 30630, was released as "ICTA Costeña" in Guatemala in 1992, "Negro Tacana" in Mexico in 1994 and "Tomeguin 93" in Cuba in 1996. DOR 390 is a BGYM resistant line (QTL from DOR 364) and carries the dominant *I* gene for resistance to BCM. DOR 390 has a type II plant and intermediate maturity of 74 DAP. DOR 390 has a black opaque, kidney shaped seed with an individual seed weight of 0.21 g.

The black seeded line DOR 500, derived from the double cross DOR 364/G18521//DOR 365/IN 100, was released as "Negro Tropical" in Mexico and "INTA Cardenas" in Nicaragua in 2002. DOR 500 is a BGYM resistant line and carries the *I* gene for resistance to BCM. DOR 500 has a type II plant and intermediate maturity of 70-72 DAP. DOR 500 has a black opaque, kidney shaped seed with an individual weight of 0.22 g.

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